



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection – Water Supply

# BRP WS 29 Chemical Addition Retrofit

for systems that serve more than 3,300 people

## Instructions and Supporting Materials

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- DEP addresses and phone numbers

### Introduction

DEP *Permit Applications*, as well as *Instructions & Support Materials*, are available for download from the DEP Web site at [mass.gov/dep](http://mass.gov/dep) in two file formats: Microsoft Word and Adobe Acrobat PDF. Either format allows documents to be printed.

*Instructions & Support Materials* files in Microsoft Word format contain a series of documents that provide guidance on how to prepare a permit application. Although we recommend that you print out the entire package, you may choose to print specific documents by selecting the appropriate page numbers for printing.

*Permit Applications* in Microsoft Word format must be downloaded separately. Users with Microsoft Word 97 or later may complete these forms electronically.

Permitting packages in Adobe Acrobat PDF format combine *Permit Applications* and *Instructions & Support Materials* in a single document. Adobe Acrobat PDF files may only be viewed and printed without alteration. *Permit Applications* in this format may not be completed electronically.



# BRP WS 29 Chemical Addition Retrofit

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## Permit Fact Sheet

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### 1. What is the purpose of this permit?

This permit serves to protect the public's health and welfare by insuring that minimum drinking water requirements are met in the chemical addition retrofit of water systems. It consists of an approval for chemical addition retrofit of water systems, for systems that serve more than 3,300 people. For systems that serve less than or equal to 3,300 people, apply for BRP WS 34. Legislative authority is stated in MGL Chapter 111 s. 160A et al. Regulatory authority is stated in 310 CMR 22.04 of the Drinking Water Regulations.

### 2. Who must apply?

Public water suppliers that serve more than 3,300 people or their representatives who want approval for the chemical addition retrofit of their water system.

### 3. What other requirements should be considered when applying for this permit?

If the water supplier or their representatives apply for this permit it may also be necessary for them to apply for other DEP water treatment permits, e.g. BRP WS 23 or BRP WS 24.

**Note:** These additional requirements are intended to serve as a guide to the applicant. It does not necessarily include all additional requirements.

### 4. What is the application fee?

The application fee is \$575.

### 5. What is the Primary Permit Location? What is the Reserve Copy Location?

PRIMARY PERMIT LOCATION  
Department of Environmental Protection  
\_\_\_\_\_\* Regional Office  
Water Supply

RESERVE COPY LOCATION  
None Required.

\*See "Addresses and Phone Numbers" page included in this package.

### 6. What are the timelines?

As of July 1, 1992 the timelines are:

	AC	T1	T2*
BRP WS 29	30	60	60

\*A second technical review will only be conducted if necessary.

There is no public comment period for this permit.

### 7. What is the annual compliance fee?

There is no annual compliance assurance fee for this permit.



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### **Permit Fact Sheet**

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**8. How long is this permit in effect?**

This permit is in effect as long as the applicant remains in compliance with appropriate laws and regulations and the Department determines that the product or operations continue to protect the public health and welfare.

**9. How can I avoid the most common mistakes made in applying for this permit?**

- a. Fill in all information on the DEP Application Form BRP WS Application.
- b. Attach all information requested on the Application Completeness Checklist.
- c. Send application and one copy of the DEP Transmittal Form to DEP Regional Office, Water Supply.
- d. Submit fee and one copy of the DEP Transmittal Form to: Department of Environmental Protection, P.O. Box 4062, Boston, MA 02211.

**10. What are the regulations that apply to this permit? Where can I get copies?**

These regulations include, but are not limited to:

- a. Drinking Water Regulations, 310 CMR 22.00.
- b. Timely Action and Fee Provisions, 310 CMR 4.00.

These may be purchased at:

State House Bookstore  
Room 116  
Boston, MA 02133  
617-727-2834

State House West Bookstore  
436 Dwight Street  
Springfield, MA 01103  
413-784-1376



Massachusetts Department of Environmental Protection  
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### Application Completeness Checklist

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- ☐ The DEP Transmittal Form is completed.
- ☐ Form BRP WS Application is completed.
- ☐ A cover letter explaining the request is attached.
- ☐ Documentation to support the request.
- ☐ A DEP application for chemical addition retrofit.
- ☐ A Massachusetts Professional Engineer's Certification and dated stamp.

To submit the application package:

- ☐ Checklist items have been completed.
- ☐ Send two copies of the application along with one copy of the DEP Transmittal Form to:

Department of Environmental Protection

\_\_\_\_\_ \* Regional Office

Water Supply

\*See "Addresses and Phone Numbers" page included in this package.

- ☐ Send fee of \$575 in the form of check or money order made payable to *Commonwealth of Massachusetts*, along with one copy of the DEP Transmittal Form to:

Department of Environmental Protection

P.O. Box 4062

Boston, MA 02211



## Massachusetts Department of Environmental Protection

# Addresses and Phone Numbers

DEP Boston  
One Winter Street  
Boston, MA 02108  
Telephone: (617) 292-5500  
Fax: (617) 556-1049  
TDD: (617) 574-6868

William X. Wall Experiment Station  
37 Shattuck Street  
Lawrence, MA 01843  
Fax: (978) 688-0352  
*Division of Environmental Analysis*  
Telephone: (978) 682-5237  
*Air Quality Surveillance*  
Telephone: (978) 975-1138

Division of Watershed Management  
627 Main Street  
Worcester, MA 01608  
Telephone: (508) 792-7470  
Fax: (508) 791-4131

DEP Western Region  
436 Dwight Street  
Suite 402  
Springfield, MA 01103  
Phone: (413) 784-1100  
Fax: (413) 784-1149



Adams	Colrain	Hampden	Monroe	Pittsfield	Tyringham
Agawam	Conway	Hancock	Montague	Plainfield	Wales
Alford	Cummington	Hatfield	Monterey	Richmond	Ware
Amherst	Dalton	Hawley	Montgomery	Rowe	Warwick
Ashfield	Deerfield	Heath	Monson	Russell	Washington
Becket	Easthampton	Hinsdale	Mount Washington	Sandisfield	Wendell
Belchertown	East Longmeadow	Holland	New Ashford	Savoy	Westfield
Bernardston	Egremont	Holyoke	New Marlborough	Sheffield	Westhampton
Blandford	Erving	Huntington	New Salem	Shelburne	West Springfield
Brimfield	Florida	Lanesborough	North Adams	Shutesbury	West Stockbridge
Buckland	Gill	Lee	Northampton	Southampton	Whately
Charlemont	Goshen	Lenox	Northfield	South Hadley	Wilbraham
Cheshire	Granby	Leverett	Orange	Southwick	Williamsburg
Chester	Granville	Leyden	Otis	Springfield	Williamstown
Chesterfield	Great Barrington	Longmeadow	Palmer	Stockbridge	Windsor
Chicopee	Greenfield	Ludlow	Pelham	Sunderland	Worthington
Clarksburg	Hadley	Middlefield	Peru	Tolland	

DEP Central Region  
627 Main Street  
Worcester, MA 01608  
Phone: (508) 792-7650  
Fax: (508) 792-7621  
TDD: (508) 767-2788



Acton	Chanton	Hopkinton	Millbury	Rutland	Uxbridge
Ashburnham	Clinton	Hubbardston	Millville	Shirley	Warren
Ashby	Douglas	Hudson	New Braintree	Shrewsbury	Webster
Athol	Dudley	Holliston	Northborough	Southborough	Westborough
Auburn	Dunstable	Lancaster	Northbridge	Southbridge	West Boylston
Ayer	East Brookfield	Leicester	North Brookfield	Spencer	West Brookfield
Barre	Fitchburg	Leominster	Oakham	Sterling	Westford
Bellingham	Gardner	Littleton	Oxford	Stow	Westminster
Berlin	Grafton	Lunenburg	Paxton	Sturbridge	Winchendon
Blackstone	Groton	Marlborough	Pepperell	Sutton	Worcester
Bolton	Harvard	Maynard	Petersham	Templeton	
Boxborough	Hardwick	Medway	Phillipston	Townsend	
Boylston	Holden	Mendon	Princeton	Tyngsborough	
Brookfield	Hopedale	Milford	Royalston	Upton	

DEP Southeast Region  
20 Riverside Drive  
Lakeville, MA 02347  
Phone: (508) 946-2700  
Fax: (508) 947-6557  
TDD: (508) 946-2795



Ablington	Danmouth	Freetown	Mattapoisett	Provincetown	Tisbury
Acushnet	Dennis	Gay Head	Middleborough	Raynham	Truro
Attleboro	Dighton	Gosnold	Nantucket	Rehoboth	Wareham
Avon	Duxbury	Halifax	New Bedford	Rochester	Wellfleet
Barnstable	Eastham	Hanover	North Attleborough	Rockland	West Bridgewater
Berkley	East Bridgewater	Hanson	Norton	Sandwich	Westport
Bourne	Easton	Harwich	Norwell	Scituate	West Tisbury
Brewster	Edgartown	Kingston	Oak Bluffs	Seekonk	Whitman
Bridgewater	Fairhaven	Lakeville	Orleans	Sharon	Wrentham
Brockton	Fall River	Manfield	Pembroke	Somerset	Yarmouth
Carver	Falmouth	Marion	Plainville	Stoughton	
Chatham	Foxborough	Marshfield	Plymouth	Swansea	
Chilmark	Franklin	Mashpee	Plympton	Taunton	

DEP Northeast Region  
One Winter Street  
Boston, MA 02108  
Telephone: (617) 654-6500  
Fax: (617) 556-1049  
TDD: (617) 574-6868



Amesbury	Chelmsford	Hingham	Merrimac	Quincy	Wakefield
Andover	Chelsea	Holbrook	Methuen	Randolph	Walpole
Arlington	Cohasset	Hull	Middleton	Reading	Waltham
Ashland	Concord	Ipswich	Millis	Revere	Watertown
Bedford	Danvers	Lawrence	Milton	Rockport	Wayland
Belmont	Dedham	Lexington	Nahant	Rowley	Wellesley
Beverly	Dover	Lincoln	Natick	Salem	Wenham
Billerica	Dracut	Lowell	Needham	Salisbury	West Newbury
Boston	Essex	Lynn	Newbury	Saugus	Weston
Boxford	Everett	Lynnfield	Newburyport	Sherborn	Westwood
Braintree	Framingham	Malden	Newton	Somerville	Weymouth
Brookline	Georgetown	Manchester-By-The-Sea	Norfolk	Stoneham	Wilmington
Burlington	Gloucester	Marblehead	North Andover	Sudbury	Winchester
Cambridge	Groveland	Medfield	North Reading	Swampscott	Winthrop
Canton	Hamilton	Medford	Norwood	Tewksbury	Woburn
Carlisle	Haverhill	Melrose	Peabody	Topsfield	



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection – Drinking Water Program

# BRP WS Application

For Water Supply Permits or Approvals

Transmittal Number \_\_\_\_\_

Facility ID# (if known) \_\_\_\_\_

## A. Application

**Important:**  
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Is this application for an ☐ Original or a ☐ Resubmittal?

2. Applicant:

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

Contact \_\_\_\_\_

Telephone \_\_\_\_\_

3. Consultant:

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

Contact \_\_\_\_\_

Telephone \_\_\_\_\_

## B. Permit

Please check which permit or approval you are applying for:

Underground Injection Control

☐ BRP WS 06 Underground Injection Control Registration

Zone II Determination for Existing Sources

☐ BRP WS 07 Approval to Conduct Pump Test for Zone II Delineation

☐ BRP WS 08 Approval of Zone II Delineation

Cross Connection

☐ BRP WS 09 Plan Approval

New Technology

☐ BRP WS 11 Minor New Technology Approval; where no field test required  
☐ Drinking Water Additive  
☐ Cross Connection Device  
☐ Water Vending Machine  
☐ Other(specify): \_\_\_\_\_

☐ BRP WS 12 Major New Technology Approval: where field testing is required

☐ BRP WS 27 New Technology with Third-party Approval

☐ BRP WS 28 Vending Site/Source Prototype

☐ BRP WS 30 Vending Site Approval

☐ BRP WS 31 Vending and POU/POE Devices with Third-party Approval

New Source Approvals <70 gpm

☐ BRP WS 13 Exploratory Phase, Site Examination, Land Use Survey and Approval to Conduct Pumping Test

☐ BRP WS 15 Pumping Test Report Approval and Approval to Construct Source

New Source Approvals >70 gpm

☐ BRP WS 17 Exploratory Phase, Site Examination & Land Use Survey

☐ BRP WS 18 To Conduct Pumping Test

☐ BRP WS 19 Pumping Test Report Approval

☐ BRP WS 20 To Construct Source

Water Treatment Approvals

☐ BRP WS 21 To Conduct Pilot Study

☐ BRP WS 22 Pilot Study Report

☐ BRP WS 23 To Construct Facility <1 mgd

☐ BRP WS 24 To Construct Facility >1 mgd

☐ BRP WS 25 Treatment Facility Modification

☐ BRP WS 29 Water Treatment: Chemical Addition Retrofits of Water Systems > 3,300 people

☐ BRP WS 33 Distribution Modifications < 3,300 people

☐ BRP WS 34 Water Treatment: Chemical Addition Retrofits of Water Systems < 3,300 people

Water Quality Assurance

☐ BRP WS 26 Sale or Acquisition of Land for Water Source

☐ BRP WS 36 Abandonment of Water Source

Distribution System Modifications

☐ BRP WS 32 Systems > 3,300 people

☐ BRP WS 34 Systems < 3,300 people

## C. Certification

"I certify, under penalty of law, that this application and all attachments were prepared under my supervision, in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted in this application, the information submitted is, to the best of my knowledge and belief, true, accurate and complete."

Print Name \_\_\_\_\_

Authorized Signature \_\_\_\_\_

Position/Title \_\_\_\_\_

Date \_\_\_\_\_



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection – Water Supply

# BRP WS 29 Chemical Addition Retrofit

Application for Approval for Treatment of Public Water  
Supply Systems That Serve More Than 3,300 People

Transmittal Number \_\_\_\_\_

Facility ID# (if known) \_\_\_\_\_

## A. Water Supply Information

**Important:**  
When filling out  
forms on the  
computer, use  
only the tab key  
to move your  
cursor - do not  
use the return  
key.



1. Name of Applicant – Board of Water Commissioners or similar body: \_\_\_\_\_

2. PWS I.D.#: \_\_\_\_\_

3. City or Town: \_\_\_\_\_

4. Total population served by system (estimate if necessary): \_\_\_\_\_

5. Other City, Town, District, Institution or Area Served: \_\_\_\_\_

6. PWS I.D.#: \_\_\_\_\_

## B. Treatment Information

**Note:** Treatment  
of public water  
supply may be  
adopted, modified,  
or discontinued  
only with the  
approval of the  
Department of  
Environmental  
Protection.

1. Sources of Water Supply to be treated:

i. \_\_\_\_\_

ii. \_\_\_\_\_

iii. \_\_\_\_\_

iv. \_\_\_\_\_

2. Treatment Type (See list A below): \_\_\_\_\_

3. Treatment Processes (See list B below):

\_\_\_\_\_ Treatment Type

\_\_\_\_\_ Code Number

4. Chemicals to be used:

### List A – Treatment Type

Disinfection By-Product Control  
Corrosion Control  
Disinfection Dechlorination  
Iron Removal  
Inorganic Removal  
Fluoridation  
Manganese Removal  
Organic Removal  
Particulate Removal  
Radionuclides Removal  
Softening  
Taste/Odor Control

### List B – Treatment Processes and Code Numbers

100 Activated Alumina  
121 Activated Carbon (Granular)  
125 Activated Carbon (Powder)  
160 Algae Control  
180 Bone Char  
200 Chloramines  
220 Chlorine Dioxide  
240 Coagulation  
300 Distillation  
320 Electrodialysis  
360 Flocculation  
380 Fluoridation  
401 Gas. Chlorination - Post  
403 Gas. Chlorination - Pre  
421 Hypochlorination - Post  
423 Hypochlorination - Pre  
441 Inhibitor - Bimetalic Phosphate  
443 Inhibitor - Hexametaphosphate  
445 Inhibitor - Orthophosphate  
447 Inhibitor - Polyphosphate  
449 Inhibitor - Silicate  
460 Ion Exchange  
500 Lime - Soda Ash Addition  
520 Microscreening  
560 Permanganate  
580 Peroxide

600 Rapid mix  
620 Reducing Agents  
623 Reducing Agents - Sodium Bisulfate  
625 Reducing Agents - Sodium Sulfite  
627 Reducing Agents - Sulfur Dioxide  
640 Reverse Osmosis  
660 Sedimentation  
680 Sequestration  
700 Sludge Treatment  
720 Ultraviolet Radiation  
740 pH Adjustment  
741 pH Adjustment - Post  
742 pH Adjustment - Pre



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection – Water Supply

# BRP WS 29 Chemical Addition Retrofit

Application for Approval for Treatment of Public Water  
Supply Systems That Serve More Than 3,300 People

Transmittal Number \_\_\_\_\_

Facility ID# (if known) \_\_\_\_\_

## C. Feed Points

	Feed Point #1		Feed Point #2	
Feed Point(s):	_____		_____	
Type of Feed Equipment:	_____		_____	
Flow Rate (GPM):	_____	_____	_____	_____
	Max	Min	Max	Min
Water Pressure:	_____	_____	_____	_____
	Max	Min	Max	Min
Feeder Capacity (Gal/24 hr or lbs/24 hr):	_____	_____	_____	_____
	Max	Min	Max	Min

## D. Designer

1. Design Engineer: \_\_\_\_\_
2. Massachusetts Registration Number: \_\_\_\_\_

## E. Certificate

The undersigned certify that the treatment facility will be operated under the supervision of the person named in Section F (or designated alternate) who will be in responsible charge of the operation, will comply with instructions and requirements of the Department of Environmental Protection, including those pertaining to maintenance of equipment, records and reports, performance of routine tests and submission of routine samples.

It is understood that any change of assignment in Sections F or G must be reported promptly in writing to the Department of Environmental Protection.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## F. Employee in Responsible Charge of Treatment Facility

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Certified Operator License Number

\_\_\_\_\_  
Grade

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date





Massachusetts Department of Environmental Protection  
Bureau of Resource Protection – Water Supply

# BRP WS 29 Chemical Addition Retrofit

Application for Approval for Treatment of Public Water  
Supply Systems That Serve More Than 3,300 People

Transmittal Number

Facility ID# (if known)

## F. Employee in Responsible Charge of Treatment Facility (cont.)

Office Address and Telephone:

Street Address

City/Town

State

Zip Code

Office Telephone Number (including extension)

Home Address and Telephone:

Street Address

City/Town

State

Zip Code

Home Telephone Number

## G. Alternate Employee in Responsible Charge of Treatment Facility

Name

Title

Certified Operator License Number

Grade

Signature

Date

Office Address and Telephone:

Street Address

City/Town

State

Zip Code

Office Telephone Number (including extension)

Home Address and Telephone:

Street Address

City/Town

State

Zip Code

Home Telephone Number